

The structure of each retinula is therefore clearly very similar to that of the retinula of many mollusks as described by Patten, and, which is more important for purposes of comparison, to *Nereis* among Annelids if Patten's interpretation\* of Carrière's figures be allowed. The two central clear cells are Patten's 'retinophoræ.' It will be observed, however, that apart from these two problematical hyaline cells the minute structure of the eyes of the Serolidæ and Cymothoidæ bear out Grenacher's conclusions rather than Patten's with regard to the morphology of the Crustacean eye. There can be no doubt that the crystalline cone is independent of the rhabdom and formed by different cells.

The specialization of the retinula-cells is, however, a new feature, and distinguishes the eye of these Isopods.

XXVI.—*Note on the Hapuku of New Zealand* (Polyprion prognathus). By Dr. A. GÜNTHER, F.R.S.

THE Hapuku of New Zealand, one of the most highly esteemed food-fishes of the southern hemisphere, and attaining to a weight of 100 pounds, has been known to naturalists since Cook's visits to that country, as has been shown by Mr. Hutton (Trans. N.-Z. Instit. v. p. 259). It was figured by Forster as well as by Parkinson, the former naming it *Perca prognathus*, a very appropriate term, to which I give preference before all others, although Schneider (Bl. Schin. p. 301) arbitrarily changed it into the less expressive *Epinephelus oxygeneios*. Forster's original description is published in 'Descript. animal. ed. Lichtenstein,' p. 309, and referred to by Cuvier (Cuv. & Val. Hist. Nat. Poiss. iii. p. 29), who, with his perfect knowledge of fishes, recognized its relation to *Polyprion*, not doubting that it was the same species as the Atlantic *P. cernium*.

The figure left by Parkinson bears the name *Sciæna gadoides*, probably in Broussonnet's handwriting; but this name seems to have remained always a MS. name.

The second period of the history of this fish begins with Owen, who, in the 'Osteological Catalogue of the College of Surgeons,' i. p. 51, described the skeleton of a New-Zealand Percoid under the name of *Centropristis gigas*. In the 'Catalogue of Fishes,' i. p. 251, I stated the reasons which

\* Mitth. Zool. Stat. Neapel, 1886.

prevented me from adopting Professor Owen's view as to the generic affinity of this fish, which I thought, in the absence of specimens preserved entire, would prove to be rather with the Murray cod, *Oligorus*; and thus the fish appeared in nearly all subsequent publications as *Oligorus gigas*. Castelnau, however ('Notes on the Edible Fishes of Victoria,' 1873, p. 8, and Proc. Zool. Soc. Vict. ii. 1873, p. 151), proposed to form a new genus for it, *Hectoria*, "on account of its armed tongue, double-pointed operculum, &c."

In more recent years the same fish has been found far from the place of its first discovery, viz. off the island of Juan Fernandez, and described by Steindachner as *Polyprion Kneri* (Sitzungsb. Wien. Acad. lxxi. p. 443); also the 'Challenger' obtained it off the same island (Chall. Shore Fish. p. 24).

Finally, the British Museum obtained from the Fisheries and Indo-Colonial Exhibitions specimens (in spirit as well as mounted) from New Zealand and Juan Fernandez\*; and a direct comparison of these specimens can leave no doubt that all belong to the same species, which is antipodal to the only other species known, *Polyprion cernium*.

Lowe (Fish. Madeira, p. 185) has shown that *P. cernium* is a deep-sea fish, swimming near the surface when young, but living habitually at a depth of 300 and more fathoms when adult. The wide range of this genus is therefore not surprising; in fact we may well expect that *P. cernium* will be met with far beyond the limits of the north-eastern Atlantic.

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## XXVII.—On Australian Fishes of the Genus *Beryx*.

By Dr. A. GÜNTHER, F.R.S.

THE British Museum has recently acquired, in a collection of fish from Adelaide, a fine specimen of *Beryx*, which, although closely allied to *Beryx affinis*, is clearly specifically distinct from it, differing somewhat in the fin-formula, in the size of the scales, and especially in the form of the nostrils and the sculpture of the opercles and of the upperside of the head. It may be named

\* Those exhibited by the Chilian Government, and presented by them to the British Museum, bore the MS. name "*Perca fernandeziana*."